




Saturday, Feb 22, 2020	Track 1: Clinical Techniques GVH 1010	Track 2: Canine Medicine Club GVH Room 1020	Track 3: Livestock Medicine GVH 1043	Track 4: Beef Producer Symposium GVH Room 1041
Audience →	Veterinary Professionals	Veterinary Professionals	Veterinary Professionals	Animal-Owning Public
7:00 – 8:00 AM	Registration and Continental Breakfast			
8:00 – 8:10 AM	Welcome and Announcements			
8:10 – 9:00 am	Anemia: Part 1 <i>C. Guillermo Couto, DVM, DACVIM (Internal Medicine & Oncology)</i>		Antimicrobial Resistance in Cattle: Lessons Learned to Improve Drug Stewardship <i>Richard Pereira, BVSc, PhD</i>	Environmental Sustainability <i>Samantha Werth, MS</i>
9:10 – 10:00 am	Anemia: Part 2 <i>C. Guillermo Couto, DVM, DACVIM (Internal Medicine & Oncology)</i>		Bovine Respiratory Disease Risk for Calves in CA <i>Sharif Aly, BVSc, MPVM, PhD</i> <i>Betsy Karle, BS, MS</i>	Preventing Disease: Beef Cattle - Vaccination Principles and Approaches <i>Bret McNabb, DVM, MPVM, DACT, DABVP</i>
10:00 – 10:30 am	Break			
10:30 – 11:20 am	Clinical Pathology: Techniques and Interpretation <i>William Vernau, DVM, PhD</i>	Electrochemotherapy: Local Therapy for Incompletely Excised Tumors <i>Carlos Rodriguez, DVM, PhD, DACVIM (Oncology)</i>	Foothill Abortion Update <i>Jeffrey Stott, MS, PhD</i>	
11:30 am – 12:20 pm	Effective Enteral Feeding <i>Jennifer Larsen, DVM, PhD, DACVN</i> Corporate Partner Support: 	Clinical Approach to Cutaneous Masses <i>Jennifer Willcox, DVM, DACVIM (Oncology)</i>	Cow Bunching on California Dairies and Update on Fly Treatments in Dairy Cattle <i>Wagdy ElAshmawy, BVSc, MVSc, MPVM, PhD</i> <i>Essam Abdelfattah, BVetMed, MVetMed, PhD</i>	Beef Cattle Genetics <i>Alison Van Eenennaam, PhD</i>
12:20 – 1:00 pm	Lunch			
1:00 – 1:50 pm	PLENARY SESSION: One Health Tick Borne Disease Lecture <i>C. Guillermo Couto, DVM DACVIM (Internal Medicine & Oncology)</i>		Corporate Partner Support: 	Beef Quality Assurance Lecture <i>Gabriele Maier, DVM, PhD, DACVPM</i> <i>Jill Scofield</i> <i>(MPT, Room 2110)</i>
2:00 – 2:50 pm	Canine and Feline Techniques Lab <i>Carlos Rodriguez, DVM, PhD, DACVIM (Oncology)</i> <i>Jonathan Dear, DVM, MS, DACVIM</i> <i>Carrie Palm, DVM, DACVIM</i> <i>Valerie Walker, RVT</i>	Hepatic Disorders: DX and Management <i>Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA</i>	Parasite Control Programs in Small Ruminants <i>Roselle Busch, DVM</i>	
3:10 – 4:00 pm		Canine and Feline Exocrine Pancreatic Insufficiency <i>Sean Hulsebosch, DVM, DACVIM</i>	Camelid Parasites and Management Strategies <i>Jessie Ziegler, DVM, MS, ACVIM (LAIM)</i>	Beef Quality Assurance Hands-On Lab <i>Gabriele Maier, DVM, PhD,, DACVPM</i> <i>(MPT, Room 2110 and UC Davis Feedlot)</i>
4:10 – 5:00 pm		Cancelled	Canine and Feline Pancreatitis <i>Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA</i>	Pertinent Issues in Livestock Medicine <i>Bret McNabb, DVM, MPVM, DACT, DABVP</i> <i>Richard Pereira, BVSc, PhD,</i> <i>Jessie Ziegler, DVM, MS, ACVIM (LAIM)</i> <i>Roselle Busch, DVM</i>

Sunday, February 23, 2020	Track 1: Clinical Trials / Ophthalmology Track GVH, Room 1020	Track 2: Critical Care/Regenerative Medicine GVH, Room 1030	Track 3: Fish/Poultry GVH, Room 1041
Audience →	Veterinary Professionals	Veterinary Professionals	Veterinary Professionals/ General Public
7:00 – 8:00 am	Registration and Continental Breakfast		
8:00 – 8:10 am	Welcome and Announcements		
8:10 – 9:00 am	Canine Copper Associated Hepatopathies <i>Jonathan Dear, DVM, MS, DACVIM</i>	Shock Fluid Treatment for Cats <i>Jamie Burkitt, DVM, DACVECC</i>	Poultry Coup Design and Nutrition <i>Maurice Pitesky, DVM, MPVM, DACVPM</i>
9:10 – 10:00 am	Latest Treatments for Anemia in Cats with CKD <i>Carrie Palm, DVM, DACVIM</i>	Analgesia in Hospitalized Cats: Life without Methadone <i>Jamie Burkitt, DVM, DACVECC</i>	Disease Prevention <i>Maurice Pitesky, DVM, MPVM, DACVPM</i>
10:00 – 10:30 am	Break		
10:30 – 11:20 am	Regurgitation & Hiatal Hernia <i>Phillip Mayhew, BVMS, DACVS</i>	Anticoagulant Monitoring and Treatment in Cats <i>Karl Jandrey, DVM, MS, DACVECC</i>	Diagnosis of Fish Diseases <i>Esteban Soto, DVM, PhD, DACVM</i>
11:30 am – 12:20 pm	Managing Feline Urethral Obstruction <i>Jamie Burkitt, DVM, DACVECC</i>	Feline “Farmacy: Top 10 Essential ER Treatments <i>Karl Jandrey, DVM, MS, DACVECC</i>	Infectious Diseases of Fish: From DX to Treatment <i>Esteban Soto, DVM, PhD, DACVM</i>
12:20 – 1:00 pm	Lunch		
1:00 – 1:50 pm	PLENARY SESSION: Managing Canine Osteoarthritis: It Takes a Village <i>Denis Marcellin-Little, DEDV, DECVS, DACVS, ACVSMR</i>		Corporate Partner Support: 
2:00 – 2:50 pm	More than Meets the Eye: Tips for Improving your Anterior Segment Examination , <i>Kathryn G Koehler, DVM, DACVO</i>	Hip Dysplasia: What to Do and When <i>Denis Marcellin-Little, DEDV, DECVS, DACVS, ACVSMR</i>	
2:50 – 3:10 pm	Break	Break	
3:10 – 4:00 pm	Corneal Emergencies: Can I Save This Eye? <i>Kathryn G Koehler, DVM, DACVO</i>	Regenerative Medicine 101 <i>Dori Borjesson, DVM, MPVM, PhD, DACVP (Clinical Pathology)</i>	
4:10 – 5:00 pm	Dry Eye: What To Do When Cyclosporine Doesn't Work , <i>Kathryn G Koehler, DVM, DACVO</i>	Regenerative Medicine Discussion <i>Dori Borjesson, DVM, MPVM, PhD, DACVP (Clinical Pathology)</i> <i>Amir Kol, DVM, PhD, DACVP (Clinical Pathology)</i> <i>Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA</i>	

Learning Objectives

LEARNING OBJECTIVES: SATURDAY, FEBRUARY 22, 2020		
TRACK 1: CLINICAL TECHNIQUES	TRACK 2: CANINE MEDICINE CLUB	TRACK 3: LIVESTOCK MEDICINE
Anemia: Part 1, C. Guillermo Couto, DVM, DACVIM (Internal Medicine & Oncology) 1. Identify different mechanisms of anemia 2. Select proper diagnostic tests 3. Implement appropriate treatment		Antimicrobial Resistance in Cattle: Lessons Learned to Improve Drug Stewardship Richard Pereira, BVSc, PhD 1. Core concepts of antimicrobial stewardship 2. Comprehend basic concepts of genome sequencing to improve data quality related to antimicrobial resistance 3. Comprehend and evaluate antimicrobial use data 4. Comprehend impacts of prophylactic antimicrobial use on antimicrobial resistance and microbiota
Anemia: Part 1, C. Guillermo Couto, DVM, DACVIM (Internal Medicine & Oncology) 1. Identify different mechanisms of anemia 2. Select proper diagnostic tests 3. Implement appropriate treatment		Bovine Respiratory Disease Risk for Calves in CA Sharif Aly, BVSc, MPVM, PhD, Betsy Karle, BS, MS 1. Increase understanding of regionally unique management practices and their association with BRD prevalence 2. Increase understanding of producer education needs related to BRD management 3. Identify risk factors for bovine respiratory disease (BRD) in calves on dairies 4. Implement a risk assessment for a dairy that raises calves 5. Estimate the prevalence of BRD in a calf herd 6. Design an intervention plan to control and prevent BRD in dairy calves
Clinical Pathology: Techniques and Interpretation William Vernau, DVM, PhD 1. Know the clinical / hematologic indications for collecting a bone marrow sample 2. Know the important technical aspects of marrow collection and how to submit a quality sample 3. Understand the advantages and disadvantages of a marrow aspirate versus a marrow biopsy	Electrochemotherapy: Local Therapy for Incompletely Excised Tumors Carlos Rodriguez, DVM, PhD, DACVIM (Oncology) 1. Understand how ECT works 2. Learn in what tumor types and in what species may be useful ECT 3. Feel comfortable discussing potential local and systemic side effects of ECT	Foothill Abortion Update, Jeffrey Stott, MS, PhD 1. Understand the causative agent of epizootic bovine abortion, commonly referred to as foothill abortion 2. Understand the candidate vaccine being commercialized and how to safely apply it

<p>Effective Enteral Feeding <i>Jennifer Larsen, DVM, PhD, DACVN</i></p> <ol style="list-style-type: none"> 1. Know the importance and components of a comprehensive nutritional assessment 2. Review the options for enteral support in dogs and cats 3. Understand the considerations for dietary selection for tube feeding 4. Understand the strategies and approach for developing an effective enteral support plan 	<p>Clinical Approach to Cutaneous Masses <i>Jennifer Willcox, DVM, DACVIM (Oncology)</i></p> <ol style="list-style-type: none"> 1. How cats and dogs differ in what's common <ol style="list-style-type: none"> a. Location can be important! b. Routes of metastasis and how this relates to tumor type 2. To stage or not to stage, when to offer staging diagnostics 	<p>Cow Bunching on California Dairies and Update on Fly Treatments in Dairy Cattle, <i>Wagdy Elashmawy, BVSC, MVSc, MPVM, PhD</i> <i>Essam Abdelfattah, BVetMed, MVetMed, PhD</i></p> <p>By the end of this presentation, the attendee will be able to:</p> <ol style="list-style-type: none"> 1. identify the different measures used for stable fly control, 2. determine the fly control measures matching with their facilities, 3. monitor the stable fly abundance around dairy through using of fly traps, 4. evaluate the effectiveness of the fly spray system and pesticide-impregnated cloth against stable flies.
<p>PLENARY SESSION: One Health Tick Borne Disease Lecture <i>C. Guillermo Couto, DVM DACVIM (Internal Medicine & Oncology)</i></p> <ol style="list-style-type: none"> 1. Recognize emerging vector borne diseases 2. Review the role of the veterinarian in One Health 3. Counsel owners and other vets on these diseases 		
<p>Canine and Feline Techniques Lab - CANCELLED <i>Carlos Rodriguez, DVM, PhD, DACVIM (Oncology)</i> <i>Jonathan Dear, DVM, MS, DACVIM</i> <i>Carrie Palm, DVM, DACVIM</i> <i>Valerie Walker, RVT</i></p>	<p>Hepatic Disorders: DX and Management <i>Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA</i></p> <ol style="list-style-type: none"> 1. To recognize and understand common patterns of hepatopathies 2. To correctly assess and classify patients with liver enzyme abnormalities 3. To apply diagnostics and treatment options to patients with hepatic disorders 	<p>Parasite Control Programs in Small Ruminants <i>Roselle Busch, DVM</i></p> <ol style="list-style-type: none"> 1. Brief review of important internal parasites 2. Discuss currently available pharmaceuticals 3. Dispute current dogma for parasite control 4. Explore novel methods of parasite control

LEARNING OBJECTIVES: SATURDAY, FEBRUARY 22, 2020		
	<p>Canine and Feline Exocrine Pancreatic Insufficiency <i>Sean Hulsebosch, DVM, DACVIM</i></p> <ol style="list-style-type: none"> 1. Understand the pathogenesis, diagnosis, and treatment of EPI in dogs and cats 	<p>Camelid Parasites and Management Strategies <i>Jessie Ziegler, DVM, MS, ACVIM (LAIM)</i></p> <ol style="list-style-type: none"> 1. Discuss common gastrointestinal parasites that affect South American camelids in the Western United States 2. Discuss treatment strategies for camelids exploring both anthelmintic and supportive care options for individual animals 3. Explore issues surrounding anthelmintic resistance in parasites that affect camelids and some non-pharmaceutical strategies for preventing disease
	<p>Canine and Feline Pancreatitis, Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA</p> <ol style="list-style-type: none"> 1. Understand pancreatic anatomy and physiology 2. Understand common causes for pancreatitis in dogs and cats 3. Understand treatment options for patients with acute and chronic pancreatitis 4. Apply the knowledge to patients in practice 	<p>Roundtable Discussion: Pertinent Issues in Livestock Medicine</p>

LEARNING OBJECTIVES: SATURDAY, FEBRUARY 22, 2020

TRACK 4: BEEF PRODUCER SYMPOSIUM

Environmental Sustainability

Samantha Werth, MS

1. Understand the environmental impacts associated with cattle production
2. Understand how to characterize methane emissions in cattle production
3. Understand the sustainability implications of our food choices

Preventing Disease Beef Cattle - Vaccination Principles and Approaches, Bret McNabb, DVM, MPVM, DACT, DABVP

1. Be Familiar with core and optional vaccination protocols for beef cattle herds in California
2. Apply Beef Quality Assurance Principles to vaccination protocols

Foothill Abortion Update, Jeffrey Stott, MS, PhD

1. Understand the causative agent of epizootic bovine abortion, commonly referred to as foothill abortion
2. Understand the candidate vaccine being commercialized and how to safely apply it

Beef Cattle Genetics, Alison Van Eenennaam, PhD

Beef Quality Assurance Lecture, Gabriele Maier, DVM, PhD, DACVPM and Jill Scofield

1. Proper injection technique to avoid injection site lesions
2. Avoiding meat residues in beef
3. Low stress cattle handling
4. Record keeping for injectable drugs
5. Safety and biosecurity during cattle transport

Beef Quality Assurance: Hands-On Lab, Gabriele Maier, DVM, PhD,, DACVPM

1. Euthanasia: Proper location for placement of captive bolt for euthanasia
2. Record keeping for drugs
3. Vaccinations: what to do and what not to do when vaccinating
4. Body condition scoring the herd
5. Subcutaneous injections: choice of needle and syringe, placement, technique

LEARNING OBJECTIVES: SUNDAY, FEBRUARY 23, 2020		
TRACK 1: CLINICAL TRIALS / OPHTHALMOLOGY TRACK	TRACK 2: CRITICAL CARE/ REGENERATIVE MEDICINE	TRACK 3: FISH/POULTRY
<p>Canine Copper Associated Hepatopathies <i>Jonathan Dear, DVM, MS, DACVIM</i></p> <ol style="list-style-type: none"> 1. Identify breeds at risk for copper associated hepatopathies 2. Discuss differences in primary vs. secondary copper accumulation in liver disease 3. Formulate diagnostic and therapeutic plan for dogs with copper associated hepatopathies 	<p>Shock Fluid Treatment for Cats, <i>Jamie Burkitt,, DVM, DACVECC</i></p> <ol style="list-style-type: none"> 1. To recall shock fluid IV bolus dosages for isotonic crystalloids, hypertonic saline, and colloids in cats. 2. To understand strategies for shock fluid administration in cats regarding aliquot volume, time of administration, and safest administration methods 	<p>Poultry Coop Design and Nutrition, <i>Maurice Pitesky, DVM, MPVM, DACVPM</i></p> <ol style="list-style-type: none"> 1. Learning the basics of coop design for backyard poultry with a focus on laying hens 2. Learning the basics of nutrition for chicks, pullets and layers
<p>Latest Treatments for Anemia in Cats with CKD <i>Carrie Palm, DVM, DACVIM</i></p> <ol style="list-style-type: none"> 1. To understand the major causes for CKD-associated anemia in dogs and cats 2. To understand how to definitively diagnose CKD-associated anemia 3. To understand how to most effectively treat CKD-associated anemia 4. To recognize currently available and more novel erythropoietin stimulating agents 	<p>Analgesia in Hospitalized Cats: Life without Methadone, <i>Jamie Burkitt,, DVM, DACVECC</i></p> <ol style="list-style-type: none"> 1. To recognize indications for pain management in hospitalized cats 2. To become familiar with non-opioid pain medication choices for hospitalized cats with moderately to severely painful, acute conditions 3. To understand the benefits of administering analgesics that affect different parts of the pain pathway 	<p>Disease Prevention, <i>Maurice Pitesky, DVM, MPVM, DACVPM</i></p> <ol style="list-style-type: none"> 1. Learning the basics of good biosecurity 2. Learning the basics of common avian diseases including Salmonella and Marek's Disease
<p>Regurgitation & Hiatal Hernia <i>Phillip Mayhew, BVMS, DACVS</i></p> <ol style="list-style-type: none"> 1. Understand the pros and cons of diagnostic techniques for diagnosis of gastro-esophageal reflux disease (GERD) and hiatal hernia 2. Describe the optimal medical management of GERD and hiatal hernia 3. Understand the anticipated outcomes of open and minimally invasive approaches for treatment of GERD and hiatal hernia in dogs 	<p>Anticoagulant Monitoring and Treatment in Cats, <i>Karl Jandrey, DVM, MS, DACVECC</i></p> <p>The participant in this presentation will be able to learn the most recent anticoagulant therapies and monitoring tools for cats with diseases that are prone to be hypercoagulable. After the discussion, therapeutic decisions and understanding of the pros and cons of each treatment will be known to allow for clinical decision making to individualized a treatment approach.</p>	<p>Diagnosis of Fish Diseases, <i>Esteban Soto, DVM, PhD, DACVM</i></p> <ol style="list-style-type: none"> 1. Explain basic diagnostic methods on fish medicine, including collection and analysis of gill and fin clip, skin scrape, and blood. 2. Explain anesthesia and euthanasia in fish. 3. Outline the methodology for a complete fish necropsy 4. Outline the methodology for sample collection and submission for histological, microscopic, microbiological, molecular, serological analysis.

<p>Managing Feline Urethral Obstruction, <i>Jamie Burkitt, DVM, DACVECC</i></p> <ol style="list-style-type: none"> To understand different strategies for management of obstructive feline idiopathic cystitis that may decrease the likelihood of short-term urethral obstruction To be able to create hospital treatment plans and discharge instructions that may help decrease short-term re-obstruction in cats with obstructive feline idiopathic cystitis 	<p>Feline Pharmacy: Top 10 Essential ER Treatments <i>Karl Jandrey, DVM, MS, DACVECC</i></p> <p>This presentation highlights the 10 essential drugs, interventions, and approach to cats in the emergency room. When the practitioner returns to work after this discussion, they will be able to fine-tune their pharmacy and supplies to maximize feline health in emergency situations.</p>	<p>Infectious Diseases of Fish: From DX to Treatment <i>Esteban Soto, DVM, PhD, DACVM</i></p> <ol style="list-style-type: none"> Recognize clinical signs associated with infectious diseases in fish Identify the main pathogens causing diseases in pet fish Compare and contrast main diagnostic methods for infectious diseases of pet fish
<p align="center">PLENARY SESSION: Managing Canine Osteoarthritis: It Takes a Village <i>Denis Marcellin-Little, DEDV, DECVS, DACVS, ACVSMR</i></p> <ol style="list-style-type: none"> To understand the common causes of osteoarthritis in dogs and their physical and functional impact To learn the relative effectiveness of strategies used to manage osteoarthritis in dogs To discuss the roles of each caregiver in successfully managing osteoarthritis in dogs over a lifetime 		
<p>More than Meets the Eye: Tips for Improving your Anterior Segment Examination, <i>Kathryn G Koehler, DVM, DACVO</i></p> <p>Performing an ophthalmic examination can sometimes be intimidating, particularly if the patient's eye is painful. This lecture is designed to review the instrumentation and techniques that are useful in diagnosing ocular disease with an emphasis placed on the anterior segment exam. We will review normal findings, learn how to recognize and interpret abnormal findings, and discuss additional diagnostic testing that may be recommended based on your findings.</p>	<p>Hip Dysplasia: What to Do and When <i>Denis Marcellin-Little, DEDV, DECVS, DACVS, ACVSMR</i></p> <ol style="list-style-type: none"> To understand the impact of canine hip dysplasia in dogs over a lifetime To list the therapeutic options that have positively impact growing dogs, young adults, middle-aged dogs, and older dogs with hip dysplasia To understand the relative value of therapeutic options for dogs with hip dysplasia 	

LEARNING OBJECTIVES: SUNDAY, FEBRUARY 23, 2020

Corneal Emergencies: Can I Save This Eye?

Kathryn G Koehler, DVM, DACVO

This lecture will review how to recognize and successfully manage the most common corneal emergencies in our veterinary patients. The diagnosis and treatment of bacterial ulcerative keratitis, corneal rupture, and corneal lacerations will be emphasized.

Regenerative Medicine 101

Dori Borjesson, DVM, MPVM, PhD, DACVP (Clinical Pathology)

1. Understand the differences between stem cell products currently available for veterinary use
2. Understand the rationale for the use of stem cells for specific disease indications in veterinary medicine
3. Learn about current clinical trials using regenerative medicine approaches at UC Davis

Dry Eye: What To Do When Cyclosporine Doesn't Work, *Kathryn G Koehler, DVM, DACVO*

Keratoconjunctivitis sicca is a chronic ocular condition that can be very frustrating to manage if not treated early and appropriately. This lecture will discuss medical management strategies to optimize patient success and what can be done if medical management fails.

Regenerative Medicine Discussion

Dori Borjesson, DVM, MPVM, PhD, DACVP (Clinical Pathology)

Amir Kol, DVM, PhD, DACVP (Clinical Pathology)

Sina Marsilio, Dr. med vet, PhD, DACVIM, DECVIM-CA

Get answers to your questions on the use of regenerative medicine products from a panel of experts.

- Are stem cells safe?
- How are cells administered?
- How many stem cells is a dose?
- Is there any evidence that they are effective?
- Can you use either autologous or allogeneic stem cells?
- What are some upcoming clinical trials?
- Can practitioners use stem cells in their own practice? And much more.